

Contaminant Loads in the Waihi and Maketū Estuaries

May 2019
Factsheet

At a recent Kaituna and Pongakawa-Waitahanui Freshwater Futures Community Group meeting, the Regional Council presented the science and modelling results on the Waihi and Maketū Estuaries, showing that they're in a degraded condition and getting worse.



Te Awa o Ngatoroirangi / Maketū Estuary



*Waihi Estuary, showing what happens after slow accumulation of excess nutrient and fine mud over long time periods. In the photo, some of the algae that bloomed (*G. chilensis*) is dying off in places, leaving highly anoxic mud behind that has patches of sulphur reducing bacteria.*

This work suggests that turning the tide on estuary health will require significant effort. Communities will all need to work together and be willing to make major changes, including how businesses operate and how land is used.

This update sets out what we know now, and what work is being carried out and planned to improve the health of the estuaries.

What we now know

Our monitoring tells us the main causes of declining estuary health include excessive levels of nitrogen, phosphorous, sediment and faecal bacteria which come from sources like farms or orchards, septic tank seepage, and some point discharges throughout the catchments such as abattoirs, waste water treatment plants and other industries which

drain into the estuaries. Although the main problems we see are estuary-based, the causes come from far and wide and include a range of activities in the wider catchment.

Regional Council scientists have estimated that to restore the estuaries to moderate ecological health and improve safety for shellfish gathering and contact recreation, current nitrogen loads

in the Waihi and Maketū estuaries would need to be reduced by more than 60%, phosphorus loads by more than 30% and *E. coli* loads by 50-60%. Sediment loads are considered high compared to natural loads but load reductions have not been calculated yet.

We also know that the water quality and ecological health in the lowland drainage networks is quite poor and that we need to improve this.

What we're doing

We're telling you what we know now, as early as we can. We are not jumping to conclusions, apportioning blame or presuming to have all the answers at this point.

The whole community draws benefits from land use and also values our water ways and estuaries. The ideal solution to improve the estuaries will require the whole community to work constructively together.

Several land owners and Council are already working hard within the catchment to change practices and bring down contaminant loads. If you want to know what you could do and what help is available call our Land Management team on 0800 884 880.

What's next

Over the coming months, Council will explore options to stop any increase in contaminant loads and start bringing them down. We'll do this in discussion with iwi, who have

particular values and interests in freshwater, and with our Freshwater Futures Community Groups who have been set up to cover a range of values and interests. Then we'll also provide more information and have discussions with local communities and the public.

So that it comes as no surprise, these are the sorts of things we are exploring:

- Farm/Orchard environment plans that identify risk areas and actions to address them.
- Good management practice requirements for all land uses and discharges, such as fencing and planting near waterways, improving irrigation and fertiliser use practices and potentially land use intensity – good practice alone is unlikely to be sufficient to prevent further estuary degradation.
- Controlling new land uses that are likely to cause more contaminant losses than current.
- Water and discharge treatment techniques.
- Stricter water quality requirements for discharges.

At the same time as we are doing this, the Government has also initiated a review of freshwater management called the "Essential Freshwater" review. That review might result in national rules or policy that affect

Waihi and Maketū estuaries are highly valued by local Māori for food gathering, recreation, cultural ceremonies, and as an integral part of their heritage and identity.

They are highly valued by the wider community for fishing, swimming, kayaking, and simply enjoying. The estuaries are recorded as significant biodiversity areas providing important habitat and food sources for many bird and fish species.

the work we are doing here:

<http://www.mfe.govt.nz/fresh-water/fresh-water-and-government/freshwater-work-programme>

You can find all Community Group notes and presentations here:

<http://www.boprc.govt.nz/our-projects/kaituna-maketu-freshwater-community-group/>

<http://www.boprc.govt.nz/our-projects/pongakawa-waitahanui-freshwater-community-group/>

For regular updates, register for Freshwater Flash e-newsletter updates here:

<http://www.boprc.govt.nz/your-council/news/newsletters-and-publications/>



Waihi Estuary, showing what happens after slow accumulation of excess nutrient and fine mud over long time periods.



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